monstrates that the Austrian specimens have the bills larger, if anything, than the average British bird. (Compare tables in Auk, 1887, pp. 34, 35.) This table also shows how closely Austrian and British examples agree in general size.

It is hardly probable that the form inhabiting the mountains of Italy should be different from that breeding in the Austrian Alps, and I therefore now regard A. rufescens as a true synonym of A. cabaret.

#### MEASUREMENTS.

Sex and Age.	Locality.	DATE.	Wing.	Tail-f.	Bill from Nostrils.	Furcation of Tail.
♂ ad.* ♂ † ♂ †	Hallein, Salzburg, Austria  Mariahoff, Steiermark, Austria  Hallein, Salzburg.  Average measurements of three males.	Nov. 15, 1883. Oct. 21, 1883. Feb. 24, 1881. Oct. 21, 1883.	71 70 71 67	53 52 54 49	7·5 7·2 7·5 7·0 7·4	10 10 12 11

<sup>\*</sup>Throat and breast red.

### THREE NEW FORMS OF NORTH AMERICAN BIRDS.

### BY WILLIAM BREWSTER.

Mr. J. M. Southwick, of Providence, has called my attention to the fact that western specimens of the Willet differ in size, color, and markings from those of the Atlantic coast. Upon testing these differences by a fairly large series I find the birds of the two regions apparently distinct, at least subspecifically. The western form may be characterized as follows:

# Symphemia semipalmata inornata, subsp. nov.—Western Willet.

Subsp. Char. Male and Female, breeding plumage: — Differing from S. semipalmata in being larger, with a longer, slenderer bill; the dark markings above fewer, finer, and fainter, on a much paler (grayishdrab) ground; those beneath duller, more confused or broken, and bordered by pinkish-salmon, which often spreads over or suffuses the entire underparts, excepting the abdomen. Middle tail-feathers either quite immaculate or very faintly barred.

<sup>†</sup> Without red.

Measurements: Eight specimens from Larimer County, Colorado, and two from Moody County, Dakota; all adults taken in May or June; average: Wing. 8.11; tail, 3.29; tarsus, 2.66; culmen from feathers, 2.46. The same birds give the following extremes: Wing. 7.88-8.26; tail, 3.10-3.50; tarsus, 2.45-2.95; culmen from feathers, 2.28-2.70.\*

Types, No. 13,529, ♂ ad., Larimer County, Colorado, May 14, 1886; No. 13.530, ♀ ad., Larimer County, Colorado, May 5, 1885; both in my collection.

Habitat. Interior of North America between the Mississippi and the Rocky Mountains, wintering along the coasts of the Gulf and Southern Atlantic States (Florida, Georgia, South Carolina).

S. semipalmata typica is brownish-olive, above confusedly and densely barred, streaked, or spotted with blackish, this giving the prevailing tone to the plumage. The bars beneath are usually coarse, dark, regular, and seldom bordered with pinkish or salmon. The central tail-feathers are almost invariably crossed by three or four distinct and continuous blackish bars. The two birds do not seem to differ in respect to the white on the wings or upper tail-coverts.

Among the breeding (May and June) specimens before me the differences just pointed out are nearly constant, and so pronounced that they may be seen at a glance. They are less striking in some examples taken in early spring (March and April) in South Carolina, Georgia, and Florida, several of which seem to be fair intermediates, although they may be eastern birds which have not perfected the nuptial plumage. I have a few specimens (winter and early spring) from Georgia and the Carolinas which are apparently true *inornata*.

In the plain gray and white winter dress the two forms appear to be distinguishable only by size. Unfortunately, this difference is not absolutely reliable as the above measurements show. Rather curiously, the young, from whatever locality, seem to be larger than the old birds.

Touching briefly on synonymy it appears:

- (1) That the *Scolopax semipalmata* of Gmelin (Sys. Nat., I, 1788, 659) was based on the eastern bird.
- (2) That *Totanus crassirostris* Vieillot (Nouv. Dict. d'Hist. Nat., 1816, 406) was founded on a specimen (from Louisiana)

<sup>\*</sup>An equal number of adult eastern birds, four from Georgia, five from Northampton County, Virginia, and one from Warwick, Rhode Island, average: Wing, 7.36; tail, 2.91; tarsus, 2.29; culmen from feathers, 2.19. Extremes: Wing, 7.06–7.75; tail, 2.71–3.30; tarsus, 2.08–2.42; culmen from feathers, 2.02–2.31.

in winter plumage, in which condition, as just stated, the two forms are not certainly separable.

- (3) That Symphemia atlantica Rafinesque (Journ. Phys., LXXXVIII, 1819, 417) is a nomen nudum.
- (4) That Totanus speculiferus Cuvier (R. A., I, 1817, 351) and Pucheran (R. et M. Z., III, 1851, 569) is not now determinable.

It follows that noue of these names are available for the Western Willet, although it is not improbable that at least two of them (*crassirostris* Vieill. and *speculiferus* Cuv.) were originally applied to it.

Most of our recent authorities describe both forms under S. semipalmata, confusing them and attributing their differences to age, season, or individual variations.

I am indebted to Mr. Southwick for most of the specimens on which the above comparisons are based, as well as for permission to announce what is really his discovery rather than my own.

## Phalænoptilus nuttalli nitidus, subsp. nov. — Frosted Poor-WILL.

Subsp. Char.—Similar to true *P. nuttalli*, but with the dark markings of the crown, back, etc., fewer and more sharply defined on a much lighter ground, the transverse bars beneath finer, paler, and less conspictious.

Habitat. Texas and Arizona.

Types, Nos. 13076,  $\mathcal{F}$  ad., and 13077,  $\mathcal{P}$  ad., Nueces River, Texas, Feb. 27, 1886; F. B. Armstrong; both in my collection.

This bird seems to be another example of a 'bleached desert race.' It is very much paler than true *nuttalli*, with fewer, finer dark markings, which, however, are more conspicuous than in *nuttalli*, owing to the generally lighter ground color. This on the forehead, sides of crown, rump, upper tail-coverts, and scapulars is pearly or ashy white, giving the parts a delicate frosted appearance. The chin, sides of head, and a broad band around the nape are light faded brown, whereas in *nuttalli* they are many shades darker and (the chin and cheeks at least) often strongly blackish. That Audubon described and figured the darker bird is open to no doubt.

Texas specimens show little variation, several taken in February on the Nueces River being practically identical with a breeding female shot at Rio Grande City in June (No. 977, Coll. of

George B. Sennett). Arizona apparently furnishes both forms for a specimen from the Catalina Mts. (¿, No. 2177, Coll. W. E. D. Scott, April 19, 1885) is typical nitidus, while six others from the same locality are referable to nuttalli. The latter, however, do not average as dark as examples from further north. California birds are usually, but by no means invariably, the deepest-colored of all. It is not impossible that both nuttalli and nitidus breed in Arizona at different elevations, or one of them (nitidus) may occur only as a migrant. The evidence at hand seems to favor the latter view.

In Baird, Brewer, and Ridgway's Land Birds (Vol. II, page 417) the female Poor-will is described as "without the white tip of tail." This is obviously an error, for not one of the twelve females before me lacks the white, although in several it is more or less tinged with buff, and is, perhaps, also usually narrower than in the male.

The material examined in the above connection includes the entire series of the National, American (of New York), and Cambridge Museums, besides those of several private collections, the whole aggregating forty-one specimens—five from Texas, two from New Mexico, sixteen from Arizona, two from Colorado, five from Utah, four from Montana, one from Nevada, and six from California.

## Vireo noveboracensis maynardi, subsp. nov.—Key West Vireo.

Subsp. Char. —In size and proportions similar to *V. crassirostris*, the bill equally large and stout. Coloring more like that of *V. noveboracensis* but grayer above, the yellow beneath paler (but of the same greenish or lemon tinge) and equally, if not more, restricted.

Wing, 2.20-2.53; tail, 1.90-2.07; tarsus, .70-.79; culmen from base, .55-.65; do. from feathers, .42-.50; do. from nostril, .30-.35; depth of bill at nostril, .18-.20

Habitat. Key West, Florida.

Types, Nos. 108,860, & ad., Key West, Fla., March 29, 1886, Str. Albatross; 108,862, Q ad., Key West, March 29, 1886, Str. Albatross; both in collection of National Museum.

In general terms this bird may be said to combine the structural peculiarities of *V. crassirostris* with the coloring of *V. noveboracensis*. It has the long, stout bill of the former, the yellow beneath greenish instead of brownish, and essentially

confined to the sides as in the latter. That it is a connecting link between the two is evident, for several of the Key West specimens unmistakably approach crassirostris, while others vary in the direction of noveboracensis. With the latter, indeed, the large series before me\* establishes a perfect intergradation. This seems to be effected within a narrow latitudinal belt, all my specimens from Northern Florida being essentially similar to those from the United States at large, the intermediates coming from Miami and the keys between that point and Key West. A bird from Cozumel Island is apparently typical noveboracensis, while two Bermuda specimens show only slight, and perhaps accidental, peculiarities.

Several of the Key West examples used in the above comparison were collected by Mr. C. J. Maynard, to whom the new bird is dedicated.

## RECENT LITERATURE.

Sclater's Catalogue of the Cœrebidæ, Tanagridæ, and Icteridæ.—In the eleventh volume of the British Museum Catalogue of Birds† Dr. P. L. Sclater treats the three strictly American families Cœrebidæ, Tanagridæ, and Icteridæ—groups to which, as is well known, he has for many years given special attention. Of the family Cœrebidæ (Guit-guits, or Honey Creepers), 70 species are recognized, of which 63 are represented in the collection of the British Museum by 672 specimens. The members of this family are of small size, mostly of brilliant color; some are closely related to the Mniotiltidæ, from which they may, however, be distinguished by "the more slender unnotched bill and filamentous termination of the extensile tongue"; others are with difficulty separable from the Tanagridæ.

Of the great group Tanagridæ 377 species are admitted, all but 20 of which are represented in the British Museum Collection by 3413 specimens. Thirty-three species are referred to the genus *Euphonia*. 61 to the genus *Calliste*, 32 to *Chlorospingus*, and 35 to *Buarremon*. The total number of genera is 59.

<sup>\*</sup>About one hundred and fifty specimens, chiefly from the collections of the National and Cambridge Museums.

<sup>†</sup> Catalogue of the Passeriformes, or Perching Birds, in the Collection of the British Museum. Fringilliformes: Part II, containing the families Cœrebidæ, Tanagridæ, and Icteridæ. By Philip Lutley Sclater. London: Printed by order of the Trustees. 1886. 8vo, pp. xviii, 431, pll. xviii.